

Credit Name: CSE 2140 2nd Language Programming

Assignment Name: GuessingGame Part A Mastery

How has your program changed from planning to coding to now? Please explain?

PLANNING:

I plan to Declare the variables, then display the introduction messages introducing the program. Scanner will be set, and random class will be created. Program will generate a random number 1-20. User will be prompted to enter an integer 1-20. If the computer generated num is equal to the user num, program will print a congratulations message and program will end. Otherwise, if computer num doesn't equal usernum, the program will print try again message and prompt user for another guess, and this will repeat until the user guesses correctly.

CODING:

1.

```
//Declare the variables that will be used in the program
int SecretNum = 0;
int UserNum = 0;

//Prompt user intro message
System.out.println("This program will generate a random number 1-20, and you will do the same.");
System.out.println("Your goal is to pick the same number as the program!");

// prepare scanner for userinputs later in program
Scanner input = new Scanner(System.in);

//Create an instance of Random class
Random random = new Random();
```

Variables are declared, program displays the introduction messages, scanner is set, and random class is created.

2.

```
// variable stores the random value, and generates a random integer in range 1 to 20
SecretNum = random.nextInt (20) +1;

//prompt for userinput
System.out.println("Please enter a integer from 1-20:");
UserNum = input.nextInt();

//if computer num = user num, congrats message is displated
if (SecretNum == UserNum) {
System.out.println("Congrats! you won!");
}
```

Program generates a random number from range 1-20. Program then prompts users for a number 1-20. If the computer number and user number is equal, the program will print congrats and the program will end.

3.

```
//else includes while loop: when computer number isnt = to user number, do the following:
else {
while (SecretNum != UserNum) {

    System.out.println("Oops... Try Again!");

    //prompt user again
    System.out.println("Please enter a integer from 1-20:");
    UserNum = input.nextInt();

    //if user guesses right congrats message is shown and program ends
    if (SecretNum == UserNum) {
        System.out.println("Congrats! you won!");
    }
}
```

If computer num and user num arent equal, then program will print try again message. The user will be prompted to enter another guess, and this will repeat until the user guesses the correct number.

End of program!